REMARKS

Applicants thank the Examiner for allowing Applicants' representatives to hold an interview on January 10, 2007. During the interview, the Examiner agreed that the amendment to claims overcome the rejections under 35 USC 112. In addition, the Examiner agreed that the following remarks seemed to overcome the rejections in view of the cited references. Applicants file a RCE with this amendment and added two new claims.

Claims 1-15, 18-22, and 45 stand rejected under 35 USC 112 for lack of enablement. Claims 1, 13, 14, 16, 18-22 have been amended, and no longer involve the synthesis of a double-stranded nucleic acid with a separated base. Support for these amendments can be found in paragraphs 21-31 of the present application. Claim 45 has been canceled. Accordingly, this rejection should be withdrawn.

Claims 1-23, 45, and 46 stand rejected under 35 USC 112 for adding new matter involving the synthesis of a double-stranded nucleic acid with a separated base. Claims 1, 13, 14, 16, and 18-22 have been amended as mentioned above. Claims 1-23 no longer involve the synthesis of a double-stranded nucleic acid with a separated base. Again, support for these amendments can be found in paragraphs 21-31 of the present application. These amendments do not add new matter. Claims 45 and 46 have been canceled. Accordingly, this rejection should be withdrawn.

Claims 16, 17 and 46 stand rejected under 35 USC 103(a) on Williams in view of Vo-Dinh and further in view of Liang. Claims 16 and 17 stand rejected under 35 USC 103(a) on Xue in view of Vo-Dinh and further in view of Liang. As amended, claim 16 involves a step of separating a purine base or pyrimidine base from a target molecule, causing an enhanced Raman signal. This step is not disclosed in Williams, Vo-Dinh, Liang, or Xue.[1] Claim 46 was canceled. Accordingly, this rejection should be withdrawn.

[1] Please note that the office action dated April 26, 2006 stated that Kneipp teaches: (1) separating a purine or pyrimidine base from a ribose or deoxyribose moiety of a nucleotide or nucleoside (paragraph 63 of Kneipp) and (2) depositing the separated base on a SERS substrate (paragraph 63 & 48 of Kneipp). Applicants would like to point out

Claims 24-28, 30-37, 39-44, 47, and 48 stand rejected under 35 USC 103(a) on Melamede in view of Kneipp and further in view of Vo-Dinh. Claim 29 stands rejected under 35 USC 103(a) on Melamede in view of Kneipp and further in view of Vo-Dinh and further in view of Liang. Claim 38 stands rejected under 35 USC 103(a) on Melamede in view of Kneipp and further in view of Vo-Dinh and further in view of Quake. Claims 24, 27, 29, and 34 have been amended, and claim 28 has been canceled. The amendments to claims 24, 27, 29, and 34 are supported by paragraphs 22, 25, 26, and 38-49 of the present application. Claims 24 and 34 as amended include a step of separating a purine base or pyrimdine base from its sugar moiety to obtain an enhanced Raman signal. This step is not disclosed in Melamede, Kneipp, Vo-Dinh, Liang, or Quake. Accordingly, claims 24-44, 47, and 48 should be allowed.

Claims 16-44 stand provisionally rejected on the ground of nonstatutory obviousness-type double patenting in view of copending Application No. 11/020,776 in view of either Willaims or Xue et al. Claims 24-44 stand provisionally rejected on the ground of nonstatory obviousness-type double patenting in view of copending Application No. 11/0202,776 in view of Melamede. Applicants acknowledge these rejections, but no further action is required at this time since these rejections are provisional.

Finally, claims 49 and 50 are new. Claims 49 and 50 are supported by paragraphs 21-32 of this application.

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that Kneipp actually does not disclose separating a purine or pyrimidine base from a ribose or deoxyribose moiety or depositing the separated base on a SERS substrate.

According to the specification, the separating step produces an enhanced Raman signal. Kneipp neither teaches this concept nor disclose separating a purine or pyrimidine base for SERS. Although Kneipp uses the word "base," the word is really referring to a nucleotide, not to a purine or pyrimidine base. In paragraph 63 of Kneipp, Kneipp recommends the use of nucleases known in the art to achieve a fragmentation of DNA or RNA molecule. Jett referred to in Kneipp also recommends the use of exonucleases to cleave individual bases from a fragment of DNA or RNA. Nucleases are phosphodiesterases. Nucleases do not cleave the bond between a purine or pyrimidine base and a ribose or deoxyribose moiety. The results of using endonucleases are nucleotides or blunt or zigzag-ended fragmented DNA or RNA molecules. The results of using exonucleases are individual nucleotides, not a purine or pyrimidine base. Accordingly, the prior arguments made to overcome this rejection have been removed as it is not necessary.

Each of the presently pending claims in this application is in immediate condition for allowance. Accordingly, the Examiner is respectfully requested to withdraw the outstanding rejections of the claims and to pass this application to issue. If it is determined that a telephone conference would expedite the prosecution of this application, the Examiner is invited to telephone the undersigned at the number given below.

In the event the U.S. Patent and Trademark Office determines that an extension and/or other relief is required, applicants petition for any required relief including extensions of time and authorize the Commissioner to charge the cost of such petitions and/or other fees due in connection with the filing of this document to Deposit Account No. 03-1952 referencing docket no. 070702007100.

Dated: January 12, 2007

Respectfully submitted,

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